

Serial No: 10/795,844

Amendment B After Final, dated April 20, 2009

Response to final Office Action, dated March 6, 2009

Remarks

Entry of the amendments presented herein is requested because it is believed that such amendments either place the application in position for immediate allowance in accordance to a telephonic interview with the examiner or place the claims in better position for appeal, and further do not provide additional searching burden upon the examiner because the subject matter of the amendments was clearly suggested by the claims as previously presented and examined.

Claims 1-56, 58, 59, and 61-64 are pending and at issue in the present application. Claims 1-56, 58, 59, and 61-64 stand rejected as obvious over Williams (U.S. Patent No. 6,314,311), in view of one or more of Dumoulin (U.S. Patent No. 5,526,812), Swindler (U.S. Patent No. 5,424,913), and Cambier U.S. Patent No. 5,159,361). Claim 51 stands objected to as to form.

Claim 51 has been amended to obviate the objection thereto.

Applicants traverse the rejections of claims 1-56, 58, 59, and 61-64 as obvious over any of the applied references either alone or in combination.

Applicants thank Examiners Bor and Casler for courtesies extended during a telephonic interview conducted on April 16, 2009. During such interview the undersigned and Examiners Bor and Casler reached an agreement that at least the amendments to claim 1 presented herein would overcome the pending rejection of claim 1 as obvious over Williams. Further, an agreement was reached that the term "ambient" as described in the specification refers to light that "project[s] sufficient light to adequately illuminate the field of interest." Specification page 4, lines 9-10. In addition, at least one dictionary definition of "ambient" supports the applicants' use of "ambient." Specifically "ambient" is defined as: "encompass," "around," or "enveloping." Webster's Third New International Dictionary, page 66 (2002 ed.). Therefore claim 1, and claims 2-40 dependent thereon are allowable over the applied references and the rejections thereof should be withdrawn, notice of which is requested.

In addition, independent claims 41 and 52 have been amended herein to further amplify the claimed subject matter in a generally similar manner to that agreed upon with respect to claim 1.

In view of the amendments to claim 41, none of the applied references discloses or renders obvious a light source including a series of digital light projectors, wherein at least a first

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of the digital light projectors is capable of projecting ambient illumination light to the field of interest adequate for viewing the field of interest during a procedure and at least a second of the projectors is capable of projecting data light, and an input device that sends signals to the illumination module that cause the first and second digital light projectors of the illumination module simultaneously to project data light along with illumination light to the field of interest, as recited by claims 41-51.

Further, in view of the amendments to claim 52, none of the applied references discloses or renders obvious a method of providing light to a field of interest during a procedure including the steps of sending control signals from an input device to an illumination module and a light projection module to simultaneously produce illumination light and data, projecting the illumination light from the illumination module onto the field of interest, projecting the data onto the field of interest from the light projection module associated with the illumination module simultaneously with the illumination light, and capturing surface data from within the field of interest, as recited by claims 52-56, 58, 59, and 61-64.

In fact, Williams discloses an image guided surgery system that allegedly "provides a ... registration technique," wherein images of a patient from a pre-operative scan, such as an MRI or CT scan, are projected onto the body of a patient in order to allow visual registration of the real space of the patient with the image of the pre-operative scan. (See, Williams, 4:6-22). "The registration system 200 ... depicts on the subject 310 a selected image representation ... of the subject's anatomy." (Williams, 4:6-9). Thus, "the orientation and position of the subject 310 and the depicted image [of the patient's anatomy] are adjusted relative to one another such that the like regions of anatomy coincide." (Williams, 4:12-14). In order to accomplish this registration, Williams discloses using a projector 230 to project the pre-operatively obtained image of the patient's body back onto the patient's body during the surgical procedure and then matching the projected image to actual points on the patient's body.

At no point, however, does Williams disclose or suggest sending signals from a control device to the projector 230 to simultaneously project both ambient illumination light for viewing the field of interest during the surgical procedure and data light.

None of Dumoulin, Swindler, and Cambier overcome the deficiencies of Williams.

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Dumoulin discloses a time multiplexed display system for producing a pre-operative image to the left and right eyes of surgeon in an alternating fashion, thereby creating a stereoscopic illusion. The stereoscopic illusion creates a depth perception for the surgeon. The pre-operative image can be registered with a patient to enable the surgeon to follow a pre-operative plan during a planned surgery.

Swindler discloses a laptop computer and associated components, but is not alleged by the examiner to disclose any of the deficiencies pointed out herein-above.

Cambier discloses a computerized system for obtaining topographic information about a surface, such as a cornea, wherein a pattern of alternating light and dark lines are projected onto the surface, a camera records the reflected image of the pattern, and a computer processes the reflected image using known stereophotogrammetric techniques to determine the topographic contours of the surface by comparing distortions in the reflected image with the known projected pattern.

For the above-indicated reasons, it is believed that the pending claims are now in condition for immediate allowance. Therefore, reconsideration and withdrawal of the pending rejections and allowance of the claims at issue are respectfully requested.

Respectfully submitted,

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